

leaves ( $2.0\text{--}3.0 \times 0.5\text{--}0.8$ ), inflated marginal cells in the apex, shorter seta (ca. 1.5 cm), and shorter operculum (ca. 1 mm) make it easy to distinguish. *Rhyncho-stegiopsis flexuosa* as treated by Welch is also much smaller with leaves  $1.0\text{--}2.5 \times 0.2\text{--}0.6$  mm with more or less filiform, flexuous apices.

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### A NEW GYPSOPHILOUS SPECIES OF *GAILLARDIA* (ASTERACEAE) FROM CHIHUAHUA, MEXICO

Recent studies have led to the discovery of a number of new taxa endemic to gypseous soils in the southwestern United States and northern Mexico. Two gypsophilic species of *Gaillardia*, *G. gypsophila* and *G. powellii*, have already been described (Turner, 1972), and the species described here represents still another.

***Gaillardia turneri* Averett & Powell, sp. nov.—FIG. 1.**

Herba perennis ad 3 dm alta ab caudex lignosa bene evoluta. Folia conspicue punctata leviter pubescentia.

Herbaceous perennial 30–75 cm tall, from a well-developed woody caudex. Stems erect, 20–50 cm long, leafy towards the base, striate. Leaves 5–7 cm long, 0.5–1.5 cm wide, the basal leaves with petioles 3–10 cm long, the upper leaves sessile or subsessile, pinnatifid, conspicuously punctate, glabrous or only slightly pubescent with soft white hairs. Involucre hemispheric 1.0–1.5 cm across, ca. 1 cm high; bracts in 2 series, ovate-lanceolate, 5–12 mm long, 1–2 mm wide, reflexed after flowering, villous. Receptacle convex, ca. 2 mm across and 1 mm high, with setae ca. 1 mm long. Ray florets 8, sterile; ligules yellow, ca. 1 cm long, 3–6 mm wide, 3-lobed, the lobes ca. 5 mm long. Disc florets numerous, collectively brownish-purple, the tube short, ca. 1 mm long, abruptly flaring into a tubular throat ca. 4 mm long, 1.0–1.5 mm wide; lobes short, acute, ca. 0.5 mm long, pubescent with purplish hairs. Achenes 2 mm long, densely pubescent with hairs extending beyond the achene. Pappus scales 10–12, ovate-lanceolate, attenuate into an awn, ca. 6 mm including a 3 mm awn. Chromosome number  $n = 17$ .

TYPE: MEXICO. CHIHUAHUA: Gypsum outcrops, 6.6 mi E of Hwy. 16 on road to new lake on Río Conchos, 6 Apr. 1971, A. M. Powell *et al.* 2025 (TEX, holotype; isotypes to be distributed).



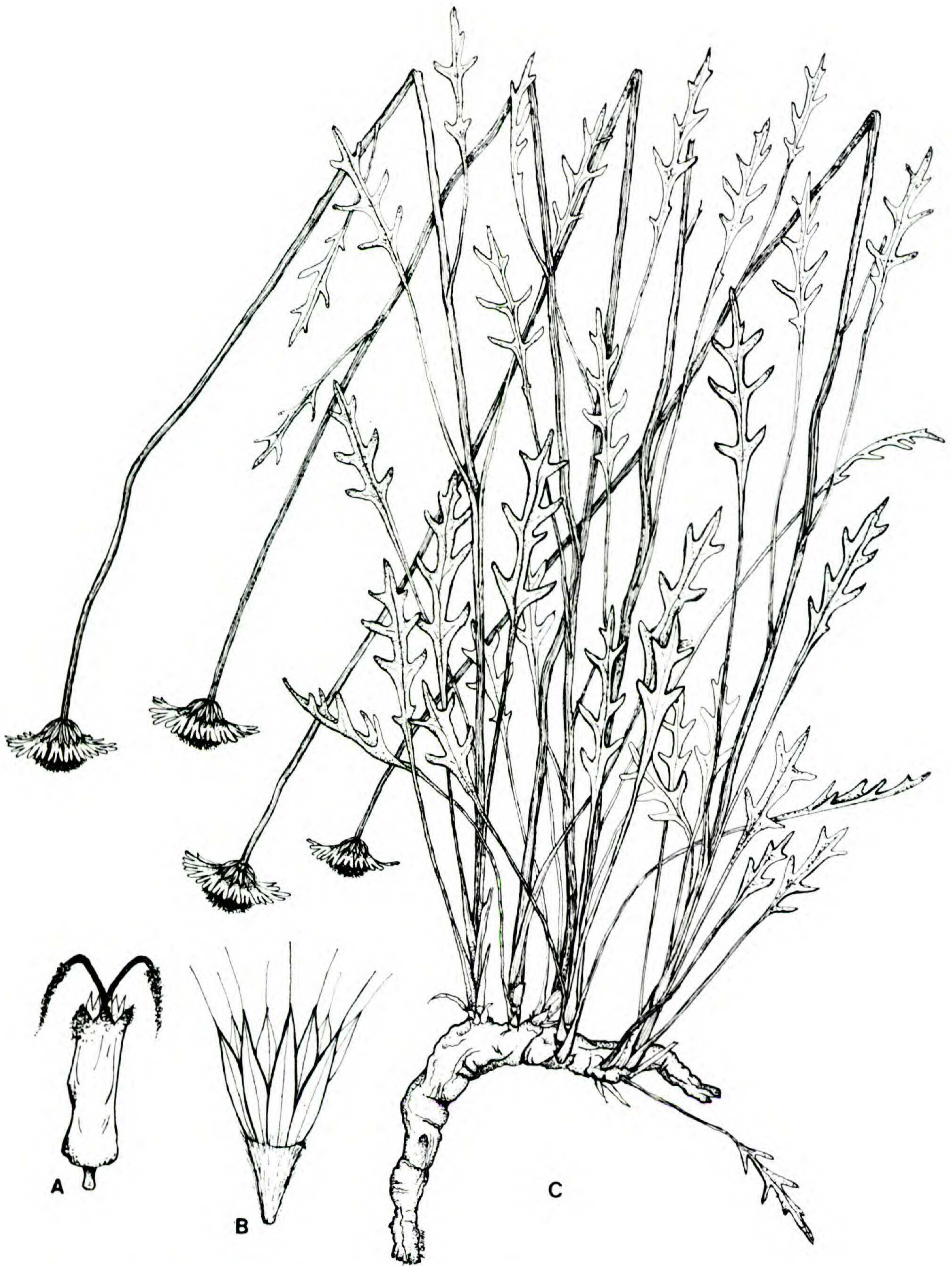


FIGURE 1. *Gaillardia turneri* Averett & Powell.—A. Disc floret.—B. Achene.—C. Habit. [After Powell *et al.* 2025, holotype (TEX).]

*Gaillardia turneri* is a diploid species closely related to *G. pinnatifida* but differs from the latter in its robust habit, woody caudex, and proclivity for gypsum habitats. Qualitative differences are apparent in the leaf vesture of the two species. The leaves of *G. pinnatifida* are more pubescent with less conspicuous



punctations than are the leaves of *G. turneri*. In support of the morphological distinctions, the two species also differ in their flavonoid complements (Averett, unpublished). The specific epithet honors Prof. B. L. Turner, University of Texas at Austin.

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### CHROMOSOME COUNTS IN *SOLANUM*

*Solanum fosbergianum* D'Arcy.  $n = 12$ . PANAMA. PANAMA PROVINCE: Finca del Indio, Cerro Jefe, *D'Arcy* 5224 (MO); cultivated progeny, *D'Arcy* 5224A (MO).

*Solanum* sp.  $n = 12$ . RWANDA. Parc des Volcans, Karisimbe-Visoke Saddle, 3000 m, *D'Arcy* 7587 (MO); cultivated progeny, *D'Arcy* 7587A (MO). This species has been known as *S. nigrum* L. in the mountains of East Africa. It exhibits considerable variability throughout the Virunga Volcanoes, but all plants of sect. *Solanum* in the area appeared to be the same taxon. They are more pubescent with longer hairs on the pedicels and of more scandent habit than plants of *S. nigrum* observed from Europe or from the northwestern United States, but it was not possible to make a clear taxonomic separation between the Virunga plants and those of *S. nigrum* from elsewhere within the study period. Current taxonomic practice (Stebbins & Paddock, 1949; Heiser, 1955, 1963; Baylis, 1958; Edmonds, 1972; D'Arcy, 1974) is to restrict the name *S. nigrum* to plants with the hexaploid chromosome number  $n = 36$ . At least six species of sect. *Solanum* have been described from the mountains of East Africa: *S. pentagonocalyx* Bitt., *S. kifinikense* Bitt., *S. subuniflorum* Bitt., *S. tarderemotum* Bitt. (all 1912); *S. hirtulum* Steud. ex Bitt. (1917), and *S. viridimaculatum* Gilli (1973). It is quite possible that one of these names applies to a diploid plant of the same species as that studied here. Because it has not been possible at this time to see appropriate types or ascertain the cytological condition of the sect. *Solanum* taxa of other African Mountains, the assignment of names to the Virunga populations must wait further studies.

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